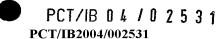


## **CLAIMS**

- 1. A screening method of arriving at a formulation, comprising of a combination of various herbal extracts from common medicinal plants, effective in the treatment and cure of degenerative conditions like cardiovascular diseases, Diabetes mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases, Asthma & Allergies, Osteoporosis & bone health, Parkinson's disease, Stress, Disorders & diseases of the eye.
- 2. A plant extract demonstrating a) insulin mimetic activity b) insulin sensitizing activity c) alpha glucosidase activity d) thermogenesis activity g) enhanced glucose uptake activity by fat cells or peripheral skeletal muscle cells f) decrease glucose secretion by hepatocytes at liver g) increased insulin seceretion by pancreatic beta cells or h) novel pathways, in specific or in synergism, having an HPLC Fraction ID Nos. as identified in Table 4, used as an antioxidant and for the treatment of degenerative conditions like cardiovascular diseases, Diabetes mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases, Asthma & Allergies, Osteoporosis & bone health, Parkinson's disease, Stress, Disorders & diseases of the eye.
- 3. A plant extract demonstrating a) insulin mimetic activity b) insulin sensitizing activity c) alpha glucosidase activity d) thermogenesis activity g) enhanced glucose uptake activity by fat cells or peripheral skeletal muscle cells f) decrease glucose secretion by hepatocytes at liver g) increased insulin secretion by pancreatic beta cells or h) novel pathways, in specific or in synergism, having an HPLC Fraction ID Nos. as identified in Tables 8 to 11, used as an antioxidant and for the treatment of degenerative conditions like cardiovascular diseases, Diabetes mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases,



Asthma & Allergies, Osteoporosis & bone health, Parkinson's disease, Stress, Disorders & diseases of the eye.

- 4. A formulation used as an antioxidant and for the treatment of degenerative conditions like cardiovascular diseases, Diabetes mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases, Asthma & Allergies, Osteoporosis & bone health, Parkinson's disease, Stress, Disorders & diseases of the eye, comprising of at least one plant extract having an HPLC Fraction ID Nos as identified in Table 4 and at least one pharmaceutically acceptable carrier, additive, diluent, or excipient.
- 5. A formulation used as an antioxidant and for the treatment of degenerative conditions like cardiovascular diseases, Diabetes mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases, Asthma & Allergies, Osteoporosis & bone health, Parkinson's disease, Stress, Disorders & diseases of the eye, comprising of at least one plant extract having an HPLC Fraction ID Nos as identified in Tables 8 to 11 and at least one pharmaceutically acceptable carrier, additive, diluent, or excipient.
- 6. A formulation supplement, as an antioxidant and for the treatment of patients with degenerative conditions like cardiovascular diseases, Diabetes mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases, Asthma & Allergies, Osteoporosis & bone health, Parkinson's disease, Stress, Disorders & diseases of the eye, including an effective amount of at least one bioactive obtained from the plant extract as shown in Tables 4 and 8 to 11 and at least one pharmaceutically acceptable carrier, additive, diluent, or excipients.

- 7. A formulation composition supplement, as an antioxidant and for the treatment of patients with degenerative conditions like cardiovascular diseases, Diabetes mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases, Asthma & Allergies, Osteoporosis & bone health, Parkinson's disease, Stress, Disorders & diseases of the eye, including an effective amount of at least one derivative molecule of the bioactive obtained from the plant extract as shown in Table 4 and at least one pharmaceutically acceptable carrier, additive, diluent, or excipient.
- 8. A formulation composition supplement, as an antioxidant and for the treatment for patients with degenerative conditions like cardiovascular diseases, Diabetes mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases, Asthma & Allergies, Osteoporosis & bone health, Parkinson's disease, Stress, Disorders & diseases of the eye, including an effective amount of at least one derivative molecule of the bioactive obtained from the plant extract as shown in Tables 8 to 11 and at least one pharmaceutically acceptable carrier, additive, diluent, or excipient.
- 9. A claim as in claim 1,2 & 3, wherein, a plant extract having an HPLC Fraction ID Nos. as identified in Tables 4 and 8 to 11, singly or optionally in combination with at least one pharmaceutically acceptable carrier, additive, diluent, or excipient, can be used for treatment of degenerative conditions like cardiovascular diseases, Diabetes mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases, Asthma & Allergies, Osteoporosis & bone health, Parkinson's disease, Stress, Disorders & diseases of the eye, by lowering the glucose level or ensuring more efficient glucose uptake, or increasing insulin sensitivity.

- 10. A claim as in claim 1, 2 & 3, wherein, a plant extract having an HPLC Fraction ID Nos. as identified in Tables 4 and 8 to 11, singly or optionally in combination with at least one pharmaceutically acceptable carrier, additive, diluent, or excipient, can be used for treatment of degenerative conditions like cardiovascular diseases, Diabetes mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases, Asthma & Allergies, Osteoporosis & bone health, Parkinson's disease, Stress, Disorders & diseases of the eye, by increasing respiratory enzyme production and subsequent thermogenesis.
- 11. A plant extract as claimed in claims 1, 2 & 3, having insulin mimetic activity selected from the extracts having an HPLC Fraction ID No. as follows:

AVDB008Le04(20)bc6C01A00,

AVDB008Le06bc6C01A00,

AVDB006Se07bc6C01A00 and

AVDB005Le07bc6C01A00

12. A plant extract as claimed in claims 1, 2 & 3, having an insulin sensitisor activity selected from the extracts having an HPLC Fraction ID No. as follows:

AVDB006Se04(20)bc6C01A00

AVDB018Fr03bc6C01A00

AVDB003Ro06bc6C01A00

- 13. A plant extract as claimed in claims 1, 2 & 3 having thermogenic activity is AVDB008Le04(20)bc6C01A00.
- 14. A plant extract as claimed in claim 1, 2 & 3, having alpha glucosidase activity is selected from the extracts having an HPLC Fraction ID No. as follows:

AVDB006Se08bc6C01A00,

AVDB006Se04(20)bc6C01A00.

## AVDB006Se06bc6C01A00 and AVDB006Se04bc6C01A00

- 15. A plant extract as claimed in claims 1, 2 & 3, having insulin mimetic activity, alpha glucosidase activity, & insulin sensitizor activity, having an HPLC Fraction ID No. AVDB006Se07bc6C01A00, used for the treatment of diabetes and degenerative disorders.
- 16. A combination of plant extracts as claimed in claim 1, 2 & 3, having an HPLC Fraction ID Nos. as follows, used for the treatment of degenerative conditions like cardiovascular diseases, Diabetes mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases, Asthma & Allergies, Osteoporosis & bone health, Parkinson's disease, Stress, Disorders & diseases of the eye: AVDB012Ap08bc6C01A00, AVDB021Ba08bc6C01A00 and AVDB006Se04(20)bc6C01A00
- 17. A combination of plant extracts as claimed in claim 1, 2 & 3, having an HPLC Fraction ID Nos. as follows, used for the treatment of degenerative conditions like cardiovascular diseases, Diabetes mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases, Asthma & Allergies, Osteoporosis & bone health, Parkinson's disease, Stress, Disorders & diseases of the eye: AVDB010Fr08bc6C01A00, AVDB021Ba08bc6C01A00, and AVDB006Se04(20)bc6C01A00.
- 18. A combination of plant extracts as claimed in claim 1, 2 & 3, having an HPLC Fraction ID Nos. as follows, used for the treatment of degenerative conditions like cardiovascular diseases, Diabetes mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases, Asthma & Allergies, Osteoporosis & bone

- health, Parkinson's disease, Stress, Disorders & diseases of the eye: AVDB012Ap08bc6C01A00 and AVDB006Se04(20)bc6C01A00.
- 19. A combination of plant extracts as claimed in claim 1, 2 & 3, having an HPLC Fraction ID Nos. as follows, used for the treatment of degenerative conditions like cardiovascular diseases, Diabetes mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases, Asthma & Allergies, Osteoporosis & bone health, Parkinson's disease, Stress, Disorders & diseases of the eye: AVDB025Se08bc6C01A00, AVDB008Lf08bc6C01A00& AVDB006Se04(20)bc6C01A00.
- 20. A combination of plant extracts as claimed in claim 1, 2 & 3, having an HPLC Fraction ID Nos., used for the treatment of degenerative conditions like cardiovascular diseases, Diabetes mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases, Asthma & Allergies, Osteoporosis & bone health, Parkinson's disease, Stress, Disorders & diseases of the eye: AVDB006Se04(20)bc6C01A00 & AVDB021Ba08bc6C01A00.
- 21. A plant extract as claimed in claims 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB006Se08bc6C01A00, used for the treatment of degenerative conditions.
- 22. A plant extract as claimed in claims 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB006Se04(20)bc6C01A00, used for the treatment of degenerative conditions.
- 23. A plant extract as claimed in claims 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB019Se08bc6C01A00, used for the treatment of degenerative conditions.

- 24. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB019Se04(20)bc6C01A00, used for the treatment of degenerative conditions.
- 25. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB008Le08bc6C01A00, used for the treatment of degenerative conditions.
- 26. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB008Le04(20)bc6C01A00, used for the treatment of degenerative conditions.
- 27. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB013Ba08bc6C01A00, used for the treatment of degenerative conditions.
- 28. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB013Ba04(20)bc6C01A00 used for the treatment of degenerative conditions.
- 29. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB002Ba08bc6C01A00, used for the treatment of degenerative conditions.
- 30. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB005Fr06bc6C01A00, used for the treatment of degenerative conditions.
- 31. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB003Ro06bc6C01A00, used for the treatment of degenerative conditions.
- 32. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB020Ro06bc6C01A00, used for the treatment of degenerative conditions.
- 33. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB019Se06bc6C01A00, used for the treatment of degenerative conditions.

- 34. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB006Se06bc6C01A00 used for the treatment of degenerative conditions.
- 35. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB002Le06bc6C01A00, used for the treatment of degenerative conditions.
- 36. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB018Fr06bc6C01A00, used for the treatment of degenerative conditions.
- 37. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB017Fr06bc6C01A00, used for the treatment of degenerative conditions.
- 38. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB003Ro03bc6C01A00 used for the treatment of degenerative conditions.
- 39. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB020Ro04bc6C01A00, used for the treatment of degenerative conditions.
- 40. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB020Ro03bc6C01A00, used for the treatment of degenerative conditions.
- 41. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB019Seo04bc6C01A00, used for the treatment of degenerative conditions.
- 42. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB004Se04bc6C01A00, used for the treatment of degenerative conditions.
- 43. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB018Fr04bc6C01A00, used for the treatment of degenerative conditions.

- 44. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB011Fr04bc6C01A00, used for the treatment of degenerative conditions.
- 45. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB017Fr04bc6C01A00, used for the treatment of degenerative conditions.
- 46. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB019Se03bc6C01A00, used for the treatment of degenerative conditions.
- 47. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB006Se03bc6C01A00, used for the treatment of degenerative conditions.
- 48. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB011Fr03bc6C01A00, used for the treatment of degenerative conditions.
- 49. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB017Fr03bc6C01A00 used for the treatment of degenerative conditions.
- 50. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB005Fr03bc6C01A00, used for the treatment of degenerative conditions.
- 51. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB008Le06bc6C01A00, used for the treatment of degenerative conditions.
- 52. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB006Fr03bc6C01A00, used for the treatment of degenerative conditions.
- 53. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB020Ro07bc6C01A00 used for the treatment of degenerative conditions.

- 54. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB019Se07bc6C01A00, used for the treatment of degenerative conditions.
- 55. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB006Se07bc6C01A00 used for the treatment of degenerative conditions.
- 56. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB018Fr07bc6C01A00, used for the treatment of degenerative conditions.
- 57. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB008Le07bc6C01A00, used for the treatment of degenerative conditions.
- 58. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB002Le05bc6C01A00, used for the treatment of degenerative conditions.
- 59. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB020Ro02bc6C01A00, used for the treatment of degenerative conditions.
- 60. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB019Se02bc6C01A00, used for the treatment of degenerative conditions.
- 61. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB002Se02bc6C01A00, used for the treatment of degenerative conditions.
- 62. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB018Fr02bc6C01A00, used for the treatment of degenerative conditions.
- 63. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB008Le06bc6C01A00, used for the treatment of degenerative conditions.

- 64. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB002Le02bc6C01A00, used for the treatment of degenerative conditions.
- 65. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB020Le08bc6C01A00, used for the treatment of degenerative conditions.
- 66. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB008Le04bc6C01A00, used for the treatment of degenerative conditions.
- 67. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB002Le03bc6C01A00, used for the treatment of degenerative conditions.
- 68. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB002Le04bc6C01A00, used for the treatment of degenerative conditions.
- 69. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB002Le07bc6C01A00, used for the treatment of degenerative conditions.
- 70. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC `Fraction ID No AVDB018Fr03bc6C01A00, used for the treatment of degenerative conditions.
- 71. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB008Le02bc6C01A00, used for the treatment of degenerative conditions.
- 72. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB003Ro04bc6C01A00, used for the treatment of degenerative conditions.
- 73. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB008Le03bc6C01A00, used for the treatment of degenerative conditions.

- 74. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB013Ba04bc6C01A00, used for the treatment of degenerative conditions.
- 75. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB008Le09bc6C01A00, used for the treatment of degenerative conditions.
- 76. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB008Le01bc6C01A00, used for the treatment of degenerative conditions.
- 77. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB019Se09bc6C01A00, used for the treatment of degenerative conditions.
- 78. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB019Se01bc6C01A00, used for the treatment of degenerative conditions.
- 79. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB005Le07bc6C01A00, used for the treatment of degenerative conditions.
- 80. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB005Le05bc6C01A00, used for the treatment of degenerative conditions.
- 81. A plant extract as claimed in claim 1, 2 & 3, wherein said extract has a HPLC Fraction ID No AVDB006Se05bc6C01A00, used for the treatment of degenerative conditions.
- 82. A successive plant extract demonstrating a) insulin mimetic activity b) insulin sensitizing activity c) alpha glucosidase activity d) thermogenesis activity g) enhanced glucose uptake activity by fat cells or peripheral skeletal muscle cells f) decrease glucose secretion by hepatocytes at liver g) increased insulin seceretion by pancreatic beta cells or h) novel pathways, in specific or in synergism, having an HPLC Fraction ID Nos. as identified in Table 12, used as an antioxidant and for the treatment of degenerative conditions like cardiovascular diseases, Diabetes

mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases, Asthma & Allergies, Osteoporosis & bone health, Parkinson's disease, Stress, Disorders & diseases of the eye.

- 83. A formulation, used as an antioxidant and for the treatment of degenerative conditions like cardiovascular diseases, Diabetes mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases, Asthma & Allergies, Osteoporosis & bone health, Parkinson's disease, Stress, Disorders & diseases of the eye, comprising of at least one successive plant extract having an HPLC Fraction ID Nos as identified in Table 12, and at least one pharmaceutically acceptable carrier, additive, diluent, or excipient.
- 84. A formulation composition supplement, as an antioxidant and for the treatment for patients with degenerative conditions like cardiovascular diseases, Diabetes mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases, Asthma & Allergies, Osteoporosis & bone health, Parkinson's disease, Stress, Disorders & diseases of the eye, including an effective amount of at least one derivative molecule of the bioactive obtained from the successive plant extract as shown in Table 12, and at least one pharmaceutically acceptable carrier, additive, diluent, or excipient.
- 85. A formulation composition supplement, as an antioxidant and for the treatment for patients with degenerative conditions like cardiovascular diseases, Diabetes mellitus, Hypertension, All types of Cancers, Obesity & weight problems, Arthritis & pain, Alzheimer's disease, Multiple sclerosis & Autoimmune diseases, Asthma & Allergies, Osteoporosis & bone health, Parkinson's disease, Stress, Disorders & diseases of the eye, including an effective amount of at least one derivative molecule of the bioactive obtained from the successive plant extract as

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shown in Table 12, and at least one pharmaceutically acceptable carrier, additive, diluent, or excipient.